



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,941	09/22/2003	Simon Robert Walmsley	ZG152US	5718
24011	7590	04/21/2005		
SILVERBROOK RESEARCH PTY LTD 393 DARLING STREET BALMAIN, 2041 AUSTRALIA				
			EXAMINER LE, THIEN MINH	
			ART UNIT 2876	PAPER NUMBER

DATE MAILED: 04/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/664,941

**Applicant(s)**

WALMSLEY ET AL.

**Examiner**

Thien M. Le

**Art Unit**

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1/21/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

Art Unit: 2876

### DETAILED ACTION

The information disclosure statement filed on 9/22/2003 has been entered.

Claims 1-20 are presented for examination.

#### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of U.S. Patent No. 6,857,571 (herein after referred as "the '571 patent"). Although the conflicting claims are not identical, they are not patentably distinct from each other because they essentially reciting the same limitations.

Claim 1 is rejected in view of claim 1 of the '571 patent. Specifically, claim 1 of the '571 patent recites:

1. A method for generating a surface printed with tags, the tags embedded with data, the method comprising the steps of: printing, using an encoder having two or more rendering engines, a pattern of tags, each tag having a data area comprising data dots and a locator

Art Unit: 2876

component comprising constant dots; using the tag encoder to obtain tag data from a tag format structure, the tag format structure being a dot based data package template containing a plurality of entries, there being an entry associated with each dot's position, an entry indicating whether a data dot or a constant dot, accordingly each entry having either fixed data bits or variable data bits, and further; interpreting each entry independently without reliance on state information.

Though the claim languages are not identical, claim 1 of the '571 patent essentially reciting all limitations set forth in claim 1 of the instant application. As can be seen, the patent protections have been granted to the earlier filed application.

Claim 2 is rejected in view of claim 4 of the '571 patent in that it recites:

4. The method of claim 1, wherein: each entry of the tag format structure comprises bits including a selected bit and the entry is interpreted as indicating a data bit, or not, according to the selected bit.

Claim 3 is rejected in view of claim 5 of the '571 patent in that it recites:

5. The method of claim 4, further comprising the step of: determining if the selected bit indicates that the entry is data, then interpreting a remainder of the entry as an address.

Claim 4 is rejected in view of claim 1 of the '571 patent. See the discussions above regarding claim 1.

Claim 5 is rejected in view of claim 6 of the '571 patent in that it recites:

6. The method of claim 1, wherein the tag format structure is comprised of one or more lines and further comprising the steps of: scaling the tag by a factor of N, by scaling the number of entries in the tag format structure; and scaling the tag format structure by replication of each entry N times and by replication of each line N times.

Claim 7 is rejected in view of claim 7 of the '571 patent in that it recites:

7. The method of claim 1, further comprising the step of: providing a tag format structure in which dot positions have a relationship and the relationship takes into account a redundancy encoding of the data.

Claim 8 is rejected in view of claim 8 of the '571 patent in that it recites:

8. The method of claim 1, further comprising the steps of: using the tag encoder to redundantly encode the data bits to conserve bandwidth.

Claim 9 is rejected in view of claim 9 of the '571 patent in that it recites:

Art Unit: 2876

9. The method of claim 1, further comprising the step of: redundantly encoding entries in the tag format structure.

Claim 10 is rejected in view of claim 10 of the '571 patent in that it recites:

10. The method of claim 1, further comprising the step of: providing the encoder with an input which defines the structure of a tag.

Claim 11 is rejected in view of claim 11 of the '571 patent in that it recites:

11. The method of claim 1, further comprising the step of: providing the encoder with an input which defines whether or not to redundantly encode the variable data bits or to treat the variable data bits as having been encoded.

Claim 12 is rejected in view of claim 12 of the '571 patent it that it recites:

11. The method of claim 1, further comprising the step of: providing the encoder with an input which defines whether or not to redundantly encode the variable data bits or to treat the variable data bits as having been encoded.

Claim 13 is rejected in view of claim 13 of the '571 patent in that it recites:

13. The method of claim 1, further comprising the step of: providing the encoder with an input comprising a number of variable data bit records, each record containing one or more variable data bits for the one or more tags on a given line of tags.

Claim 14 is rejected in view of claim 14 of the '571 patent in that it recites:

14. The method of claim 1, further comprising the step of: printed the tags with an infrared absorptive ink that can be read with a tag sensing device.

Claim 15 is rejected in view of claim 15 of the '571 patent in that it recites:

15. The method of claim 1, further comprising the step of: using the encoder to merge encoded tag data with a basic tag structure and place dots in at least one output FIFO in a correct order for subsequent printing.

Claim 16 is rejected in view of claim 16 of the '571 patent in that it recites:

16. The method of claim 1, further comprising the step of: generating encoded tag data from original data bits on-the-fly to minimize buffer space.

Claim 17 is rejected in view of claim 17 of the '571 patent it that it recites:

17. The method of claim 1, further comprising the step of: printing each tag so as to have a background pattern further comprising a locator component.

Claim 18 is rejected in view of claim 18 of the '571 patent in that it recites:

Art Unit: 2876

18. The method of claim 17, wherein: the locator component is circular.

Claim 19 is rejected in view of claim 19 of the '571 patent in that it recites:

19. The method of claim 9, further comprising the step of: performing the encoding using double indirection encoding.

Claim 20 is rejected in view of claim 20 of the '571 patent in that it recites:

20. The method of claim 1, further comprising the step of: printing the dots as continuous tone dots.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thien M. Le whose telephone number is (571) 272-2396. The examiner can normally be reached on Monday - Friday from 7:30am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/664,941  
Art Unit: 2876

A handwritten signature in black ink, appearing to read 'Le, Thien Minh', with a stylized, cursive script.

Page 6

**Le, Thien Minh**  
**Primary Examiner**  
**Art Unit 2876**  
**April 12, 2005**